

IN THE CLAIMS

Please amend the claims as follows:

1. (Presently amended) A therapeutic device for neural tissue regeneration comprising a tube, or a polymeric sheet that is rolled into a tube, which comprises a biodegradable polymer that biodegrades to provide sustained release of an anti-inflammatory compound to the neural a-tissue.
2. (Original) The device of claim 1 wherein the anti-inflammatory compound is a salicylate.
3. (Original) The device of claim 1 wherein the anti-inflammatory compound is a non-steroidal anti-inflammatory compound.
4. (Original) The device of claim 1 wherein the anti-inflammatory compound is an aromatic anti-inflammatory compound.
5. (Original) The device of claim 1 wherein the anti-inflammatory compound is a cyclooxygenase inhibitor.
6. (Original) The device of claim 1 wherein the anti-inflammatory compound is a cyclooxygenase-1 inhibitor.
7. (Original) The device of claim 1 wherein the anti-inflammatory compound is a cyclooxygenase-2 inhibitor.
8. (Withdrawn) The device of claim 1 wherein the anti-inflammatory compound is etodolac, celebrex, meloxicam, piroxicam, nimesulide, nabumetone, rofecoxib or a combination thereof.
9. (Original) The device of claim 1 wherein the anti-inflammatory compound is aceclofenac, acemetacin, ϵ -acetamidocaproic acid, acetaminosalol, acetylsalicylic acid alclofenac, alminoprofen, 3-amino-4-hydroxybutyric acid, amixetrine, ampiroxicam, amtolmetin gaucil, apazone, aspirin, bendazac, benorylate, benoxaprofen, benzpiperylon, benzydamine, bermoprofen, α -bisabolol, bucolome, bucolome, bucloxic acid, bufexamac, bumadizon, butibufen, calcium acetylsalicylate, carprofen, celebrex, choline salicylate, cinmetacin, clopirac, clidanac, diclofenac, difenamizole, difenpiramide, diflunisal, ditazol, droxicam, emorfazone, enfenamic acid, epirizole, etersalate, etodolac, etofenamate, felbinac, fenbufen, fenclozic acid,

fenoprofen, fentiazac, fepradinol, feprazone, flunoxaprofen, flurbiprofen, glucametacin, gueiazulene, ibufenac, ibuprofen, ibuproxam, imidazole salicylate, indomethacin, indoprofen, isofezolac, isonixin, isoxepac, isoxicam, ketoprofen, ketorolac, ketorolac tromethamine, lomoxicam, lonazolac, loxoprofen, lysine acetylsalicylate, magnesium salicylate, mefenamic acid, meloxicam, metiazinic acid, mofebutazone, mofezolac, morazone, morpholine salicylate, nabumetone, 1-naphthyl salicylate, naproxen, naproxen sodium, nimesulide, olsalazine, oxaceprol, oxametacine, oxaprozin, oxyphenbutazone, paranyline, parsalmide, perisoxal, phenyl acetylsalicylate phenylbutazone, phenyl salicylate, piroxicam, piketoprofen, pipebuzone, pirazolac, piroxicam, pirprofen, pranoprofen, proglumetacin, propyphenazone, proquazone, protizinic acid, ramifenazone, rofecoxib, S-adenosylmethionine, salacetamide, salsalate, salicylic acid, salicylic acid, sodium salicylate, sulindac, superoxide dismutase, suprofen, suxibuzone, talniflumate, tenidap, tenoxicam, terofenamate, thiazolinobutazone, tiaprofenic acid, tiaramide, tinoridine, tolmetin sodium, tropesin, xenbucin, ximoprofen, zaltoprofen, zileuton, zomepirac or a combination thereof.

10. (Canceled)

11. (Canceled)

12. (Original) The device of claim 1 wherein the biodegradable polymer comprises one or more units of formula I:



wherein:

R₁ is a group that will provide an anti-inflammatory agent upon hydrolysis of polymer;

each A is independently an amide linkage, a thioester linkage, or an ester linkage; and

L is a linking group.

13. (Original) The device of claim 1 wherein the biodegradable polymer comprises one or more units of formula II:



wherein:

R₂ and R₃ are each independently a group that will yield an anti-inflammatory agent upon hydrolysis of the polymer;
each A is independently an amide, thioester, or ester linkage; and
each L is independently a linking group.

14. (Original) The device of claim 12 or 13 wherein the anti-inflammatory compound is a salicylate.

15-66. (Canceled)

67. (New) The device of claim 1 wherein the polymeric sheet has ridges or spacers that are configured to optimally guide the growth and extension of the neural tissue.

68. (New) The device of claim 67 wherein sheet has multiple linear ridges that run the length of the sheet so that upon rolling, the sheet forms a porous tube with a multitude of tubules running from one end of the rolled sheet to another.

69. (New) The device of claim 67 wherein the ridges or spacers are about one micron to about fifty microns in height.

70. (New) The device of claim 67 wherein the length of the polymeric sheet is from about one millimeter to about twenty centimeters.

71. (New) The device of claim 67 wherein the length of the polymeric sheet is from about three millimeters to about ten centimeters.

72. (New) The device of claim 67 wherein the length of the polymeric sheet is from about five millimeters to about five centimeters.

73. (New) The device of claim 1 wherein the tube is of the approximate diameter to accommodate an uninjured neural tissue.

74. (New) The device of claim 1 wherein the tube has a diameter of from about one millimeter to about ten centimeters.

75. (New) The device of claim 1 wherein the tube has a diameter of from about three millimeters to about five centimeters.

76. (New) The device of claim 1 wherein the tube has a diameter of from about five millimeters to about two centimeters.

77. (New) The device of claim 1 further comprising biologically active molecules adsorbed or covalently attached in a pattern on the biodegradable polymer.